

# Deformable Mirrors Capture Exoplanet Data, Reflect Lasers

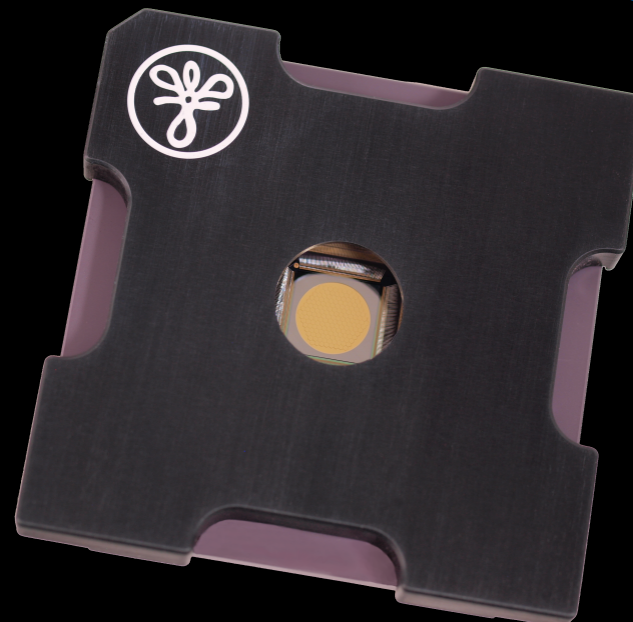


***Goddard Space Flight Center***

***Iris AO, Inc.  
Berkeley, California***

## **NASA Technology**

- ◆ The Balloon Exoplanet Nulling Interferometer mission will use a visible nulling coronagraph (VNC) to detect, image, and characterize exoplanets
- ◆ Starlight can seep through the VNC and lower the contrast in an image so Goddard turned to deformable mirrors (DMs) to correct for the light



## **Partnership**

- ◆ Goddard started working with Iris AO to improve the company's microelectromechanical (MEMS) DMs for imaging and characterizing exoplanets
- ◆ Iris AO and Goddard tested the new DMs, and they had impressive results
- ◆ Outside of NASA, the technology is being evaluated and used in research and industrial applications

## **Benefits**

- ◆ The technology is being used in ophthalmic instruments to improve images of the eye
- ◆ In the future, it could be incorporated into biological microscopes to get a better view of tissues
- ◆ The technology also has promise in shaping laser beams more precisely for manufacturing